

# VHF Antenna - Omnidirectional, Low-PIM/Hi-PIP, 2.9 dBd Model DS1F03P36U-D

Specifications	
Design Type	True Corporate Feed
Frequency Range	150-164 MHz
Passive Intermodulation – PIM (2 x 20W sources)	-150 dBc, 3 <sup>rd</sup> Order
Bandwidth	14 MHz
Gain - dBd (average over BW)	2.9 dBd
Configuration	Single antenna (1-port)
Beam Tilt (electrical downtilt)	None (0°)
Vertical Beamwidth (E-Plane) typ.	30°
Impedance – Ohms	50
VSWR / Return Loss -- dB	1.5:1 / 14 dB (min.)
Average Power Rating	500 W
Peak Instantaneous Power	25 kW
Polarization	Vertical
Lightning Protection	Direct Ground
Connector	7/16 DIN female
Total Length	12.6 feet
Equivalent Flat-Plate Area	2.5 sq. ft.
Lateral Windload Thrust @100mph	95 lbf.
Rated Wind Speed	150 mph (without ice)
Mounting Mast Length	35 inches
Mounting Hardware (included)	DSH3V3R
Radome diameter	3.0 inches
Mast diameter	2.5 inches
Radome color	Horizon Blue
Weight, antenna and hardware	47 lbs.
Shipping Weight	67 lbs.
Invertibility	Yes, this model is invertible, however pattern is optimized for upright mounting.



## Features and Benefits

Tested to stringent Peak Instantaneous Power (PIP) levels of 25 KW using dbSpectra’s 12-channel P25 PIP test bed. High PIP level is demanded by today’s digital systems.

PIM-rated Design – 3<sup>rd</sup>-Order performance better than -150 dBc.

True Corporate Feed Array – provides for excellent gain and pattern consistency across a wider frequency range.

Sturdy Construction – Heavy-wall fiberglass radome minimizes tip deflection.

Excellent Lightning Protection – heavy internal conductor DC ground.

## Radiation Patterns:

